

WATER PRESSURE: REWRITING THE SAFE DRINKING WATER ACT

The new Republican majority opened the 104th Congress in 1995 determined to overhaul the nation's structure of environmental regulation. Republicans proposed bills to rewrite landmark laws such as the Endangered Species Act, the Clean Water Act, and the Superfund program. Congressional leaders also proposed so-called regulatory reform bills intended to root out ineffective rules. Yet to date, these proposals have collapsed, either stalled or defeated, with one exception. A revision of the Safe Drinking Water Act (SDWA) could be the first and only major environmental bill to be signed into law in 1996, experts say.

On 29 November 1995, the Senate passed an SDWA reauthorization bill, S.1316, by a vote of 99-0. The proposed legislation would hand over more authority to states for the management of drinking water, provide funds for upgrades of water systems and offer states latitude in determining how these funds can be used. The bill would also require the EPA to provide further proof that each new regulation is scientifically sound and economically efficient.

On 11 June 1996, the House of Representatives Commerce Committee also unanimously passed a bill, H.R. 3604, to amend the SDWA; the full House is likely to vote on it soon. The House bill is similar to the Senate proposal, though the House added a provision requiring water systems to send information to customers about contaminants in local supplies each year. The full House passed H.R. 3604 on June 25. Now a Senate-House conference



committee will work on compromise legislation to iron out the differences in the two bills, with the two chambers to vote on a final bill later this year.

What accounts for progress toward reauthorization of drinking-water standards, while every other bill addressing environmental regulation has spawned conflict and gridlock? One reason is that the SDWA rewrite bills do not address today's most volatile environmental issues, such as regulation of wetlands and endangered species, private property rights, and the private use of public lands. "Drinking water is a public health issue as well as an environmental issue, so everyone has sought some center ground," says Paul Schwartz, national campaigns director of Clean Water Action, an environmental organization based in Washington, DC.

Moreover, the Safe Drinking Water Coalition, an ad hoc organization of states, cities, private utilities, rural communities,

and water research groups, has aggressively sought changes in drinking-water regulations, backing the SDWA bills. The coalition includes the National Governors Association, the National Association of Counties, the National Conference of State Legislatures, the National League of Cities, the American Water Works Association, the U.S. Conference of Mayors. "These are not your usual constituent groups," says Jonathan Tollman, environmental policy analyst at the Competitive Enterprise Institute, a free-market think tank in Washington, DC. "When a governor calls up a congressman and says, 'Today's system of drinking water regulation is a real problem,' the congressman is likely to listen."

History of Health

For generations in the United States, pollution was considered mostly a local or regional problem. But by the late 1960s, the public had become increasingly concerned about pollution's effects on human health and the environment. So, in the mid-1970s, the federal government began an ambitious program to address pollutants on a national scale. Along with the Clean Air Act and the Clean Water Act, Congress passed the SDWA to provide national drinking-water standards that specify "maximum contaminant levels" or treatment techniques for contaminants.

Under the 1974 act, however, the EPA administrator was under no deadline pressure to add contaminants to the list of 22 standards regulated by the Public Health

Joseph Tarr

Service before the creation of the EPA. In fact, the EPA had added only one contaminant to this list by 1986. As a result, states were still developing their own minimum standards.

In the mid-1980s, the National Governors Association pressured Congress to establish a faster timetable for the EPA to issue regulations. With the 1986 amendments to the law, Congress specified that 83 contaminants must be regulated within three years, with 25 contaminants added to the list every three years hence.

To date, the EPA has established rules for 80 of the required 83 contaminants. But under law, standards must continue growing in number. The first group of 25 additional standards were due in 1991, though the EPA has been unable to keep up with this schedule.

"When compared to other nations, the United States is believed to have some of the safest drinking water in the world," writes Mary E. Tiemann, a specialist in environmental policy at the Congressional Research Service in a 1 December 1995 report, *Safe Drinking Water Act: Implementing the 1986 Amendments*. Still, she notes, contaminants remain a serious problem in some public supplies. Pathogens such as bacteria, parasites, and viruses in public supplies sicken thousands of people annually. And thousands of public water systems violate one or more SDWA requirements each year. Most of the violations are by small systems, those serving less than 3,300 people, that struggle financially to implement new standards.

Furthermore, the nation's drinking-water regulations often are not aimed at the most serious public health concerns, critics say. The regulatory system establishes "standards which do not make sense from either the economic or public health perspective in some cases," said Donald Satchwell, board member of the East Green Acres Irrigation District in Post Falls, Idaho, in testimony to the U.S. Senate on 19 October 1995. "The public may be willing to spend additional money for safer drinking; however, it is not fair to force the public to pay more when there is no real or extremely limited safety improvement in their water."

Reforming Schedule

The Senate and House bills would slow the galloping pace of new regulations. Under these bills, the EPA's requirement to regulate 25 contaminants every 3 years would be revoked. Instead, starting in 2001, the EPA would be required to consider regulating at least 5 contaminants every 5 years. But under these bills, if scientific evidence

shows that a contaminant does not warrant a standard, the EPA administrator does not have to issue one.

The environmental community agrees that the schedule for standard-setting must be changed. "Regulating 25 contaminants every three years is impossible," says Schwartz. "Water systems cannot sustain this rush of new standards. We recognize that relief from rapidly increasing standards is needed." However, environmentalists are worried that the SDWA bills would give "total discretion to the administrator," allowing the EPA chief too much authority to decide if contaminants should be regulated, Schwartz says.

"Somebody has to make the decision whether a standard is warranted," counters

Congress. Local governments must supply funds to enforce 174 federal mandates, including rules that address solid waste, stormwater runoff, sewage treatment, and underground storage tanks. Frequently, critics say, the federal government does not supply enough money to administer the rules, breaking budgets of local governments and creating "unfunded mandates." In addition, many standards do not allow for local conditions, which frustrates state and community leaders. The debate over unfunded mandates is not only about "who pays, but who calls the shots," says Tollman, "the federal government or the states, counties, and municipalities?"

Drinking-water regulation is one of the most expensive unfunded mandates. When

"WITH DRINKING-WATER REGULATION, WE HAVE CREATED A FRANKENSTEIN MONSTER OF UNFUNDED MANDATES." — PAUL SCHWARTZ

Albert Warburton, director of legislative affairs for the American Water Works Association. "The administrator would have to consider the scientific evidence in making her decision."

The SDWA bills, moreover, would help some communities find less expensive techniques to treat water. Under current law, the EPA sets an ideal health-protection goal for each contaminant. The goal for carcinogens is zero, for instance. Once the goal is set, the EPA specifies that the "best available technology" be used to clean water as close to the goal as possible. But under the SDWA rewrites, the EPA could set less stringent health protection goals for some contaminants. States, in turn, could provide variances for smaller and medium-sized systems, which could use less expensive technologies to meet those goals. Instead of using the "best available technology," communities can use the "best available *affordable* technology." However, "the bills still have weight toward public health protection," says Bill Diamond, director of the EPA Drinking Water Standards Division. If a technology "has very high costs with questionable benefits or benefits that are very small, then some communities can back off and use a less expensive technology that meets the test of protecting the public health."

Financing Upgrades

In recent years, many communities have complained bitterly about nationwide environmental rules handed down from

the EPA finalizes a new standard for a contaminant, communities often have to upgrade their systems to meet that standard. Yet communities must find the money to do so on their own, because Congress has not authorized a SDWA program to finance improvements of drinking-water plants. By contrast, the Clean Water Act has provided billions in federal funding to build and maintain municipal sewage treatment plants. "With drinking-water regulation, we have created a Frankenstein monster of unfunded mandates," says Schwartz.

Meanwhile, all sides agree that many drinking-water facilities are crumbling and outdated. The EPA estimates that the nation's drinking-water facilities must have upgrades costing about \$8.6 billion to meet current standards, with about 40% of these expenditures by small systems. "A major effort to invest in the long-neglected water supply infrastructure is needed urgently," writes Erik D. Olson in a September 1993 Natural Resources Defense Council report, *Think Before You Drink: The Failure of the Nation's Drinking Water System to Protect Public Health*.

To address the problem, the SDWA bills would provide \$500 million in 1996 and \$1 billion annually through 2003 to help water systems finance projects such as upgrading facilities, consolidating inefficient small systems, and training operators. These funds would be administered under a revolving loan fund similar to one established under the Clean Water Act. The

fund would provide grants to states, which must put up a 25% match, to offer below-market loans to drinking-water utilities. Also, each state could choose to transfer money to its Clean Water Act fund if sewage treatment plants are a higher priority. Or a state could choose to transfer money from the Clean Water Act fund into the SDWA fund if the state regards upgrading drinking-water facilities as a more urgent need.

Assessing Costs and Risks

In recent years, critics have argued that the EPA's drinking-water program does not have a reasonable process of balancing a contaminant's human-health risk against costs of treating a pollutant.

Under SDWA bills, the EPA would have to further study each proposed standard's cost versus its risk-reduction benefits. But the bills "leave the EPA a lot of wiggle room, giving the agency flexibility to consider or not consider its own analysis," says Steve Bagwell, manager of legislative affairs for the Water Environment Federation, an organization of water management professionals, based in Alexandria, Virginia. "The House has been trying to take away this flexibility from the EPA, and put more teeth into these provisions. So now the negotiators are dealing with legalistic arguments over small amounts of words that have potentially big effects," he says.

Both bills have also exempted the so-called combined rule on water disinfectants and microbes in drinking water from further cost and risk studies. Proposed in February 1994, this combined rule is actually two rules intended to work in tandem. Under the first phase of the combined rule,

large water systems have to meet tighter standards for disinfectants such as chlorine, and disinfection byproducts that may cause some forms of cancer; and these systems have to meet new standards to protect water systems against harmful microorganisms such as *Giardia* and *Cryptosporidium*. Under a second phase of the rule, scheduled for implementation in 1999, these standards could be tightened further if necessary.

The combined rule was developed through an innovative "negotiated regulation" under the SDWA among state and local officials, water industry representatives, consumer groups, and the environmental community. Diamond argues that costs and risks were carefully analyzed in the negotiated regulation. If Congress requires negotiators to conduct another series of risk and cost analyses, the negotiated rule effectively would be thrown out, and the process would have to start over. Most water suppliers also want Congress to respect conditions generated in the negotiated regulation, says Warburton.

Yet chlorine manufacturers still hope for another round of risk and cost analysis for the combined rule. "The chlorine industry regards this rule as a first step in an attempt to start a ban of chlorine products," says Warburton.

Chlorine has vastly reduced water-borne illnesses, so present levels of disinfectant in the nation's drinking water should be maintained, says Gardner Bates, director of communications for the Chlorine Institute, a trade association of chlorine users and manufacturers. "This is not an economic issue for us. Less than 5% of chlorine produced and used in the United States is for treatment of drinking water and wastewater. We want chlorine to be

preserved in water systems for public health reasons."

But, in fact, negotiators did not target chlorine for elimination from drinking water. As described in the 19 July 1994 *Federal Register* notice on the combined rule, negotiators agreed that chlorine, which kills microorganisms with great effectiveness, has become an important tool to protect public health. For most water systems, chlorine, in tandem with certain water clarification techniques, would be the best available technology as a primary disinfectant, negotiators agreed. Water clarification techniques, which include coagulation, sedimentation, and filtration, remove many organic materials that react with chlorine to form disinfectant byproducts. Chlorine also would be needed by most systems as a residual disinfectant, negotiators agreed. Some alternate disinfectants, such as ozone and chloramine, do not provide strong enough residuals in the distribution system to prevent regrowth of bacteria.

So, it seems unlikely that the chlorine industry will win this battle, most observers say. Republicans want to pass important environmental legislation this year, and Democrats are holding steady on limitations of cost-benefit analysis. Thus, odds for SDWA passage in 1996 look good. For several years, lawmakers and regulators have been under pressure to reform the nation's drinking-water system. Now a SDWA rewrite could provide important solutions, helping to establish wiser spending priorities and easing financial burdens from smaller systems, while also protecting the public health.

John Tibbetts

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